

TGS

SL

Texas Gulf Sulphur Company

Annual Report 1966



KIDD CREEK MINE



CONCENTRATOR

HOYLE

Directors

William S. Beinecke

President and Director
The Sperry and Hutchinson Company
New York, New York

Edward K. Brass

Financial Adviser and
Chairman of Plans and Finance Committee
New York, New York

Francis G. Coates

Partner,
Baker, Botts, Shepherd & Coates,
Houston, Texas

Harold Decker

Director of Halliburton Company
and Director and Chairman of the
Executive Committee of Eastex, Inc.
Houston, Texas

Charles F. Fogarty

Executive Vice President
New York, New York

William S. Kirkpatrick*

Chairman
Cominco, Ltd.
Montreal, Quebec

Thomas S. Lamont

Director
Morgan Guaranty Trust Company of
New York

Allan Shivers

Investments,
Austin, Texas

Donald B. Smiley

Vice Chairman of the Board,
Treasurer, and Director
R. H. Macy & Co., Inc.
New York, New York

Claude O. Stephens

President,
New York, New York

John F. Thompson

Honorary Chairman and member
of the Executive Committee
International Nickel Co. of Canada, Ltd.
New York, New York

Lowell C. Wadmond

Partner,
White & Case,
New York, New York

*Resigned October 1966

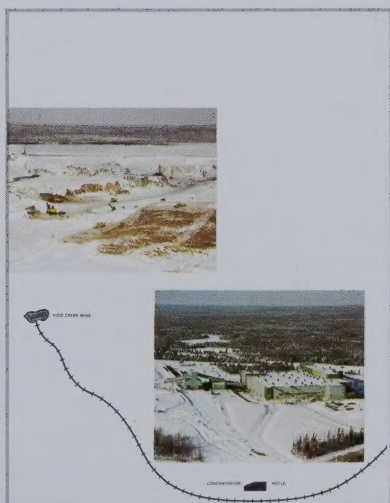


Texas Gulf Sulphur Company

Annual Report 1966

Contents

Financial Highlights	2
President's Letter	3
Metals Division	7
Phosphate Division	11
Potash Operations	15
Sulphur Operations	17
Oil and Gas Operations	19
Exploration and New Projects	20
Financial Summary	21
Accountants' Report	27
Ten-Year Financial Review	28
Officers and Staff	30



About the Cover Upper left shows busy Kidd Creek Mine operations in early January, 1967. A 17.5-mile rail line from the Mine to the Hoyle concentrator (lower right) was completed in 1966.

Comparative Financial Highlights

	1966	1965	1964
Gross revenue from sales.....	\$132,718,172	\$ 98,981,161	\$ 70,369,732
Net income	\$ 28,095,817	\$ 18,160,941	\$ 11,556,189
Net income per share	\$ 2.80	\$ 1.81	\$ 1.15
Cash dividends per share.....	\$.40	\$.40	\$.40
Working capital	\$ 33,528,733	\$ 52,457,583	\$ 87,170,543
Ratio of current assets to current liabilities.....	2.4 to 1	5.4 to 1	9.7 to 1
Property, plant and equipment (net).....	\$275,384,177	\$145,407,082	\$ 92,380,246
Total assets	\$363,037,949	\$240,883,596	\$220,643,438
Non-current notes payable.....	\$135,000,000	\$ 55,000,000	\$ 55,000,000
Stockholders' equity	\$176,412,881	\$151,987,134	\$137,381,561
Number of stockholders.....	49,553	47,911	50,821
Number of shares outstanding.....	10,048,319	10,034,119	10,015,899

Executive Offices

200 Park Avenue
New York, New York 10017

Registrar

The Chase Manhattan Bank, N.A.
1 Chase Manhattan Plaza
New York, New York 10015

Transfer Agent

Bankers Trust Company
16 Wall Street
New York, New York 10015

Annual Meeting

The Annual Meeting of
Stockholders will be held in the
Houston Club building, Houston,
Texas on Thursday, April 27, 1967.
Notice of Meeting, Proxy Statement
and Proxy will be sent to all
Stockholders on or about
March 27, 1967

To Our Stockholders

Total revenues of \$136,055,981 in 1966 were the highest in the company's history, representing an increase of 33 per cent over 1965. Earnings per share of \$2.80 compared with \$1.81 in 1965, an increase of 55 per cent.

While all of our products—sulphur, oil, gas, potash, phosphate and metals—contributed to this record sales volume, sulphur continued to account for most of the earnings in 1966. By year's end, our two major diversification projects—metals in Canada and phosphate in North Carolina—were approaching the stage of full scale operations and should add further to sales and earnings in 1967.

Sulphur

Demand exceeded production for the fourth consecutive year even though the sulphur industry in the Free World increased its output by 7.8 per cent. Shipments by Texas Gulf and the industry in 1966 again established new records. TGS production amounted to nearly 3,000,000 long tons, an increase of 15 per cent over 1965. But the excess of demand over supply required further withdrawals from our inventories.

Sulphur prices continued to recover from the depressed levels which have prevailed over the past ten years. However, the current domestic price of \$29.50 per long ton f.o.b. Gulf Coast ports for bright sulphur is still significantly lower than the U.S. export price which is considerably below other prices currently charged in world sulphur markets. Only improved prices can provide the incentive to search for sulphur and to develop new and existing sources which the world will continue to need.

Phosphate

Operations at our Lee Creek Mine in North Carolina have been brought into production step by step, including the start-up of fertilizer plants which combine the use of two of our principal products, sulphur and phosphate. Half of the Lee Creek Mine's annual production of 3,000,000 tons of phosphate rock will be used at the site to produce phosphoric acid and phosphate fertilizers. First shipments of phosphate rock began April 1. Grinding plants which prepare phosphate rock for acidulation in the manufacture of phosphoric acid and fertilizer materials were completed in



Claude O. Stephens, President

August. The sulphuric acid plant, with a design capacity of 3,050 tons a day, and the phosphoric acid plant, with a design capacity of nearly 2,000 tons a day, were started in November. Other plants which will produce phosphate fertilizer materials, including triple superphosphate, granular triple superphosphate, diammonium phosphate and super-phosphoric acid, were all in operation by January, 1967.

Potash

During the year, about 300,000 tons of muriate of potash were produced at our Cane Creek Mine near Moab, Utah. It has been decided to add crystallizing facilities to the Cane Creek plant which will increase the overall recovery of the operation and give us additional product of high grade. Depending upon the delivery of equipment, the crystallizer should go into operation early in 1968. Engineering work is being completed for a second shaft which will be drilled. It will be started this spring and is scheduled to be completed by the end of 1967.

Metals

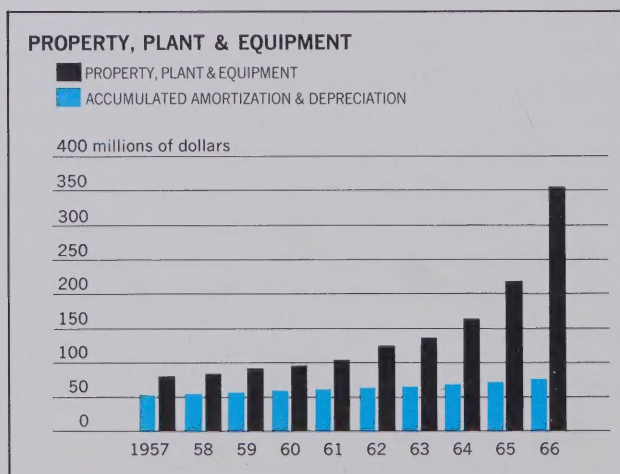
Operations at our Kidd Creek Mine and Hoyle concentrator near Timmins, Ontario, Canada, began No-

vember 16 with the successful start-up of the first of three 3,000-ton-per-day ore concentrator units. Start-up of the second and third units began in mid-January and mid-February.

Despite the delays caused by a series of strikes against the contractor building the Hoyle concentrator, the beginning of production at this early date was a major achievement. The smooth start-up of the first circuit, which is designed to process copper-zinc ore, was unusually successful for an entirely new operation. Initial efficiencies and rates of recovery have been highly satisfactory. The third circuit is now processing zinc-lead-silver ore, and the second circuit, which will handle ore of either type, is presently processing copper-zinc ore. Copper concentrates are being shipped for smelting and refining in Canada, and zinc concentrates are being custom smelted in the United States, Europe and Japan.

Ecstall Mining Limited

On January 1, 1967, the Kidd Creek Mine and Hoyle concentrator were transferred to a wholly owned subsidiary, Ecstall Mining Limited. President of Ecstall is Dr. C. F. Fogarty, who continues as Executive Vice President of TGS. R.D. Mollison is Executive Vice President, and F. Raymond Jones, Vice President-Production. It is our intention to have Ecstall Mining Limited, a Delaware corporation, operate in a way that will qualify it for the lower income tax rate afforded Western Hemisphere Trade Corporations under the United States Internal Revenue Code.



Curtis Agreement

On May 19 TGS and The Curtis Publishing Company completed the agreement under which Texas Gulf acquired from Curtis for \$24 million its 10 per cent net profits interest in a part of the Kidd Creek Mine and its timber and mineral lands totalling 110,000 acres in Ontario and 141,000 acres in Pennsylvania.

Trona

Commercial development of our trona reserves in the Green River area of southwestern Wyoming is being implemented in stages. We plan to start sinking a mine shaft in the second half of 1967. Trona is readily converted into soda ash which is another basic raw material for the chemical and other industries.

Marketing

Sales and Transportation under our centralized Marketing Division assumed increasing importance during 1966 as our phosphate and metals operations came on stream and shipments of sulphur and potash increased substantially. Because of the related nature of so many of our products, we are taking advantage of many opportunities for improving our profitability through careful planning and coordination of marketing and transportation facilities.

Exploration

As a natural resources company, we are of course continuing to place heavy emphasis on exploration as the life-blood of our future.

Exploration expenditures were increased again in 1966. We continued to expand our staff and are exploring in North America and other parts of the world for sulphur, phosphate, potash, metals, oil and gas, and other related natural resources.

Capital expenditures

Capital expenditures during 1966 were at an all-time high for the company, totalling approximately \$140,000,000 compared to \$60,000,000 in 1965. Additions to plant, property and equipment included \$52,000,000 for the phosphate mine and fertilizer complex in North Carolina, \$55,000,000 for the Kidd Creek mine development and Hoyle concentrator, and \$24,000,000 for the Curtis properties. Your company still remains in a strong financial position to undertake

additional projects which may develop to support continued growth and diversification.

Litigation

On August 19 Judge Dudley B. Bonsal dismissed charges brought against the company and 11 individuals by the Securities and Exchange Commission in a civil suit in the Federal Court for the Southern District of New York. The S.E.C. has filed an appeal with the United States Court of Appeals for the Second Circuit, as have the two individual defendants whose purchases of TGS stock were found by the Court to have violated a rule of the S.E.C. Hearings on the appeals are scheduled for March 20.

Hearings before Chief Justice George A. Gale in the Supreme Court of Ontario, Canada, in a suit brought against the company by Leitch Gold Mines, Ltd. and Mastodon-Highland Bell Mines, Ltd. began October 31 and are continuing with periodic recesses.

Directors

William S. Beinecke, president of The Sperry and Hutchinson Company, was elected a director at the annual meeting of stockholders on April 28. William S. Kirkpatrick, chairman of Cominco, Ltd., resigned from our board on October 14. Edward K. Brass, a financial adviser and chairman of the plans and finance committee, was elected a director on February 16, 1967.

Corporate Organization Changes

During 1966 headquarters of three Division Vice Presidents were established in the regions of their principal operations: Richard D. Mollison, Vice President, Metals, in Toronto, Canada; Dr. Guy T. McBride, Jr., Vice President, Phosphate, in Aurora, North Carolina; and Ira E. McKeever, Jr., Vice President, Frasch Sulphur, in Houston, Texas.

H. V. W. Donohoo, formerly Manager of Exploration, Houston, was named General Manager of the Potash Division, Moab, Utah. Frank R. Moulton succeeded him as Regional Manager of Exploration.

Dr. Leo J. Miller, formerly Manager of the Phosphate Division in North Carolina has been selected to head a new company which is to be formed to explore for natural resources in Australia. His headquarters will be in Australia.

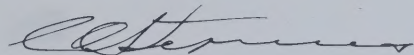
Employee Relations

The number of employees increased in 1966 from 1,900 to 2,700. Our growing staffs in North Carolina and in Canada have added substantially to employment in these areas. TGS employee benefit programs are believed to be equal to or better than the best available in the communities where we operate.

The great progress made in all of our operations during 1966 is evidence of the loyalty, cooperation and hard work of our employees which we deeply appreciate.

On behalf of the board of directors, I would also like to thank our stockholders for their many expressions of interest and support.

Respectfully submitted,



Claude O. Stephens
President

February 17, 1967



Production of Zinc and Copper Concentrates Began in 1966

Production of zinc and copper concentrates at our Hoyle concentrator began November 16, 1966. The first of three 3,000-ton-per-day ore concentrator units was started on that date, followed by completion of the other two units in mid-January and mid-February.

During 1966 development and construction work at the Kidd Creek Mine site, 15 miles north of Timmins, Ontario was completed, a 17.5-mile rail line to the concentrator was built, and all of the equipment necessary to keep the ore moving from the mine to the concentrator at the design rate of three million tons per year was installed, tested and put into operation.

Outline of the Kidd Creek open pit mine took shape early in the year with the removal of six million cubic yards of clay and muskeg overburden. While development and construction work at the mine and concentrator were being carried forward by contractors, TGS was proceeding with the selection and training of the operating personnel.

About 200,000 Tons of Ore Were Processed in Pilot Plant Tests

In developing the open pit, approximately 200,000 tons of ore were removed and processed through nearby mills, providing pilot plant tests for milling the ore. Experience gained in these tests contributed significantly to the successful start-up of the first Hoyle concentrator unit. Although a series of wildcat strikes against the contractors delayed completion of the concentrator, most of the work continued close to schedule. A TGS staff of approximately 400 was ready at year's end to carry out full-scale operations.

Marketing Arrangements Completed

Arrangements for marketing the output from the mine were also completed during the year. When production started at Hoyle, copper concentrates were

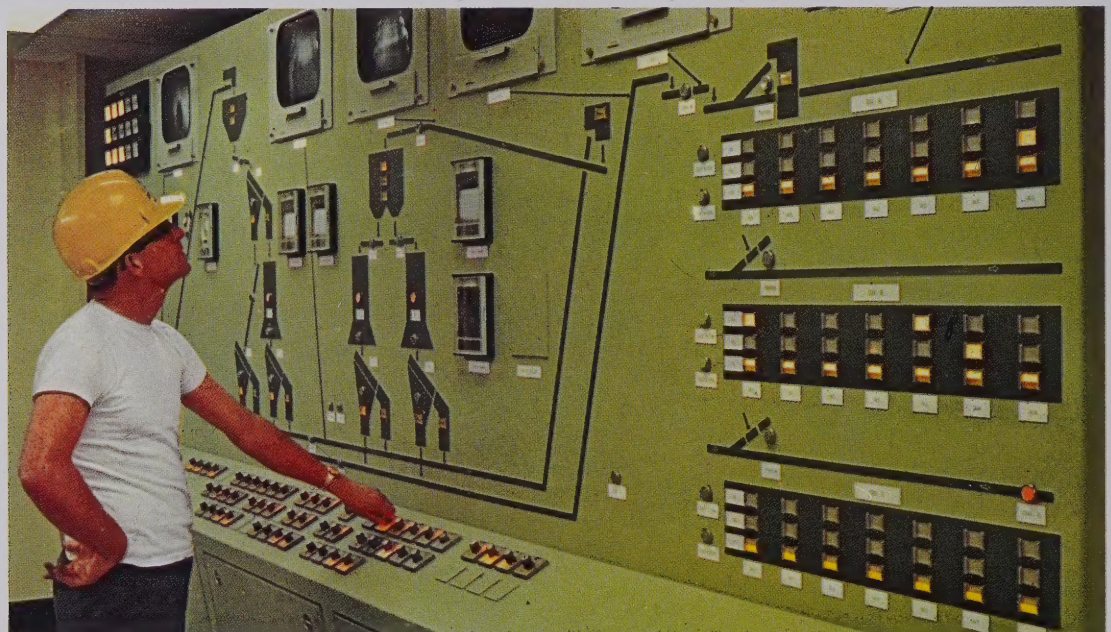


Flotation units in the Hoyle concentrator began spinning November 16, 1966, when the first of three circuits, each capable of processing 3,000 tons of ore per day, was started up. Initial performance was highly satisfactory.



◀ **Equipment for the Kidd Creek Mine** includes three 4-yard electric shovels, a 4-yard diesel shovel, two 6-yard electric shovels and a fleet of eighteen 50-ton diesel trucks. Trucks carry ore to the primary crusher on the rim of the open pit mine, where it is reduced to eight-inch or smaller pieces before shipment by rail to the Hoyle concentrator.

Twenty specially designed 125-ton cars haul ore from the primary crusher at the Kidd Creek Mine over the 17.5-mile rail line to the Hoyle concentrator. The rail spur, operated by TGS personnel, has three 1,000-horsepower locomotives. Concentrates of copper, zinc and lead are shipped over the main line of the Ontario Northland R.R., which is adjacent to the concentrator.



Closed circuit television screens on one of the instrument panels in the central control room of the Hoyle concentrator enable operators to maintain visual contact with operations at key points. The mill covers an area the size of six football fields.

shipped for smelting and refining in Canada and zinc concentrates to custom smelters in the United States, Europe, and Japan.

An agreement with Noranda provides for smelting of the copper concentrates at their smelter in Quebec, and for the refining of the resulting copper anodes in Montreal. Production at an annual rate of about 100 million pounds of refined copper is expected to begin in 1967.

It is estimated that the Hoyle concentrator will produce annually zinc concentrates containing about 250,000 tons of zinc, lead concentrates containing about 10,000 tons of lead, and copper concentrates containing about 50,000 tons of copper. Silver values will be recovered primarily in the copper and lead concentrates. The zinc concentrates will also contain cadmium and small amounts of silver. The concentrator has been designed to provide for the addition at a later date of a fourth flotation circuit for the production of pyrites.

Construction of TGS's own zinc smelter in Ontario is under study and engineering design work for such a smelter has been budgeted for 1967.

Mine and Concentrator Transferred to Ecstall Mining Limited, Wholly Owned Subsidiary

The Kidd Creek Mine and Hoyle concentrator were transferred on January 1, 1967 to a wholly owned subsidiary of Texas Gulf Sulphur Company, Ecstall Mining Limited, a name of historical significance to Texas Gulf inasmuch as Ecstall was the name of the first Canadian mining property acquired by the company in 1937.

From the beginning, key administrative positions for the Kidd Creek and Hoyle operations have been filled by Canadians of outstanding ability and experience.

Free World production of copper in 1966 declined 70,000 tons, or 1.3 per cent, to 5.14 million short tons and consumption of copper increased 426,000 tons, or 8.1 per cent, to 5.69 million tons.

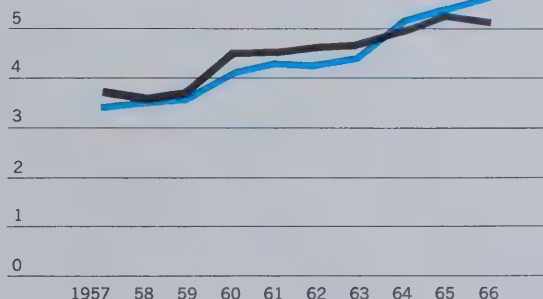
Zinc production and consumption reached record levels in 1966. Free World production of slab zinc rose by 15.7 per cent over 1965, and consumption grew 7.9 per cent.



Three sets of large mills grind and regrind the ore in the first stage of processing at the Hoyle concentrator. The first mill circuit is designed to process zinc-copper ore; the third circuit zinc-lead-silver ore; while the second circuit will handle either type.

FREE WORLD PRODUCTION AND CONSUMPTION OF COPPER

6 millions of short tons



FREE WORLD PRODUCTION AND CONSUMPTION OF SLAB ZINC

4 millions of short tons





Phosphate

All Units of Lee Creek Mine and Phosphate Fertilizer Complex Completed on Schedule

All units of the Phosphate Division's mill and fertilizer complex at the Lee Creek Mine in Aurora, North Carolina were completed essentially on schedule in 1966 and early 1967, bringing into operation one of the world's largest installations for the production of phosphate fertilizer materials.

More than \$80 million has been invested in the Lee Creek Mine, mill, transportation facilities, acid and fertilizer plants. Design annual production capacities include:

3,000,000 tons of phosphate rock, of which 1,460,000 tons will be used in the Lee Creek acid and fertilizer plants

640,000 tons of 54% phosphoric acid, of which 415,000 tons will be used in the production of fertilizer materials at Lee Creek

357,000 tons of triple superphosphate

220,000 tons of diammonium phosphate

89,800 tons of superphosphoric acid

Phosphoric Acid Plant First to Use Raw Materials from Two TGS Operations

The sulphuric and phosphoric acid plants—largest of their kind in the industry—were completed in November. Since phosphoric acid is made by combining phosphate rock with sulphuric acid, the start-up of the phosphoric acid plant on Thanksgiving Eve was a significant event in the history of the company's diversification. It became the first operation to use two of the company's raw materials—sulphur from Frasch mines in Texas and phosphate from North Carolina. Looking ahead, the combination of phosphate from North Carolina and sulphur recoverable from pyrites and smelter gases in Canada is under study.

◀ **Key units of Texas Gulf's North Carolina fertilizer complex**, all of which went on stream in 1966 and early 1967, are shown in this aerial view. The phosphoric acid and sulphuric acid plants are in the right foreground. To the right of the barge dock are the superphosphoric acid plant and fertilizer materials plants and storage facilities.



Largest electric dragline in the phosphate mining industry, equipped with a 72-cubic-yard shovel, went into operation early in 1966 at the Lee Creek Mine at Aurora, North Carolina.



First plant to use two of Texas Gulf's natural resources—sulphur and phosphate—began operating Thanksgiving Eve in 1966. In this plant, wet process phosphoric acid is made by combining phosphate rock with sulphuric acid. Design capacity of 640,000 tons of 54% phosphoric acid annually is one of the largest in the phosphate fertilizer industry.



Lee Creek's sulphuric acid plants, key units in the phosphate fertilizer complex, went on stream in November. Sulphuric acid is made by controlled burning of sulphur under proper temperature conditions. The TGS acid plants incorporate the latest equipment to reduce air pollution to a minimum.



Fertilizer materials plants and three large storage sheds are adjacent to Lee Creek's facilities for shipment either by rail or barge to both domestic and world markets.

Throughout 1966 major units at Lee Creek were brought into operation step by step. The mill which beneficiates ore from the mine by a flotation process was completed early in the year. Shipments of phosphate rock began April 1, just two years after the board of directors approved the first phase of capital construction at the Lee Creek Mine.

In July the production of calcined phosphate rock began, improving the quality of the phosphate rock from about 68 per cent to 72 per cent of bone phosphate of lime (BPL). Grinding plants which prepare phosphate rock for the manufacture of certain phosphatic fertilizer materials were completed in August. This was followed by the start-up of the acid and fertilizer materials plants in November, December and January.

North Carolina Ports Authority Begins Construction of Improved Deepwater Shipping Facilities

Fertilizer materials will be shipped to domestic markets by rail over the new 31.5 mile line completed by the Norfolk Southern Railway during the year. Shipments to world markets will be facilitated by improved deepwater port and handling facilities at Morehead City. The North Carolina Ports Authority has awarded contracts for the Morehead City project and it is scheduled to be completed by mid-1968.

Lee Creek's production facilities are coming into production none too soon to help fill the world's soaring demands for fertilizer materials. In the past ten years the fertilizer growth rate in the United States has been about twice that of the industrial growth of the economy, and worldwide needs for continuing increases in fertilizer production have been described as "boundless." It has been estimated that by 1970 the underdeveloped nations of the world would have to quadruple their 1963/64 rate of consumption of the three basic plant nutrients—nitrogen, phosphate, and potash—merely to maintain their present inadequate dietary standards. And even in the United States, where fertilizer consumption increased about 130 per cent in the past decade, the present rate of consumption, about 250 pounds of fertilizers per acre, is considered a minimum in offsetting the loss of soil fertility. By contrast, more than 1,000 pounds per acre are being used in Japan.

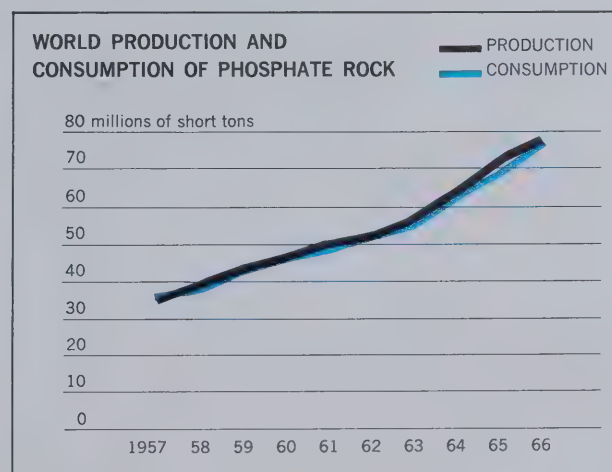
The growing demands for phosphate and sulphur are closely allied. Seventy per cent of domestic phosphate rock shipments and 46 per cent of U.S. sulphur consumption goes into fertilizers. The balance is used in the chemical and other basic industries.

World Consumption and Production of Phosphate Rock Continues to Grow

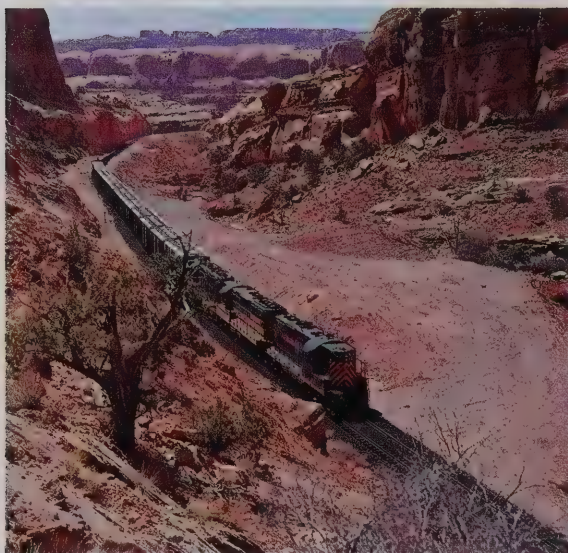
In the United States, phosphate rock consumption increased 13.4 per cent to a total of 23.2 million tons in 1966, and world consumption rose 10.6 per cent to 76.9 million tons. United States production of phosphate rock in 1966 amounted to 34.7 million tons, an increase of 17.2 per cent, and world production was 78.4 million tons, a gain of 8.3 per cent.

Texas Gulf's fertilizer products will also help supply the growing demand for high-analysis materials. Triple superphosphates are growing in popularity because of lower freight costs, and diammonium phosphate offers advantages in manufacturing as well as freight economies for both direct application as fertilizer and for use in mixtures which are blended to the soil requirements of the individual farmer.

Current published prices for phosphate products are in the range of from \$6.50 to \$8.50 per ton for phosphate rock, f.o.b. producing point; from \$60 to \$64 per ton for various triple superphosphates, f.o.b. producing point; and from about \$84 to \$92 per ton for phosphoric acid delivered.



Production of muriate of potash at Texas Gulf's Cane Creek Mine near Moab, Utah increased during 1966. Crystallizer facilities will be added to the aboveground installations which will increase recovery and provide additional product of a high grade.



All potash is shipped from Cane Creek over a 36-mile rail spur which traverses the colorful red canyonlands of Utah to connect with the main line of the Denver and Rio Grande Western at Brendel.



Potash is stored at Cane Creek in two large warehouses, each with a capacity of 125,000 tons, to meet the seasonal demands of the fertilizer industry.

Potash Production Increased in 1966 and Further Improvements Are Expected

Nearly 300,000 tons of muriate of potash were produced in 1966 at the Cane Creek Mine near Moab, Utah. The outlook is for continuing improvement in mine production and steps are being taken to further increase the recovery in the mill.

Although worldwide demand increased, potash prices fell during 1966. Prices of typical muriate of potash (equivalent to about 60 percent K_2O) declined to a range of \$17 to \$23 per short ton in the United States, compared to a range of \$22 to \$28 in 1965. Because of this and lower than expected production, the Potash Division did not show a profit during the year. However, revenue increased substantially and will continue to grow in 1967 with further improvements in mine and mill production.

Emphasis in 1966 was placed on development of the mine and adapting mining methods to improve production in the ore body. Total production of ore increased to more than 1,200,000 tons, and in the final quarter the average of tons hoisted per day was nearly 4,000. The ore being mined contains muriate of potash in association with common salt or sodium chloride. The configurations of the ore body required extensive development work which has advanced rapidly, but meanwhile resulted in mining higher than expected percentages of salt, a waste product which must be removed in the milling process.

Changes have been made in the mill to improve product quality and the percentage of recovery, and further changes are being made which will enable the mill to handle up to 6,000 tons per day from the mine.

Contracts for the design and construction of a crystallizer addition to the present mill circuit have been awarded. Construction is scheduled to commence in May and a crystallized product should be ready to market early in 1968. This new unit will produce a premium coarse muriate product not presently in our product line and will serve to further increase recovery.

Modifications in our present compactor circuit will also provide a greater quantity of granular product. These advances in mill capabilities will help meet the growing fertilizer market for these coarser materials.

Engineering work is being completed on a second shaft. This will be a drilled shaft and will be equipped

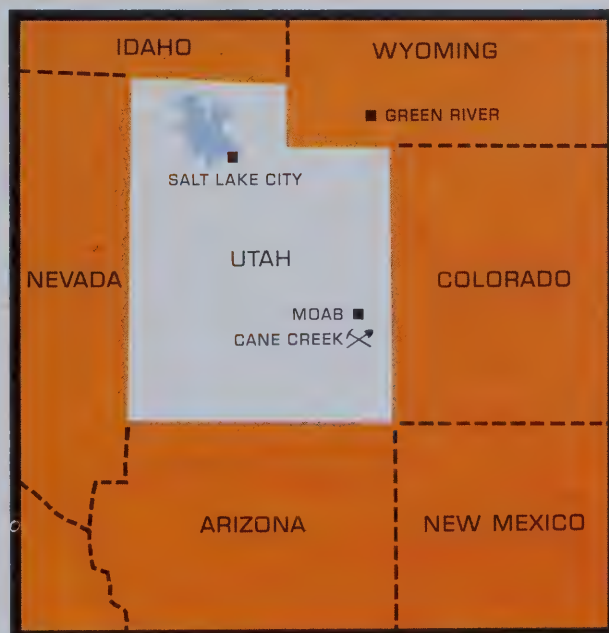
for the auxiliary hoisting of men and minor supplies. Work on this new shaft should be under way in April and is scheduled to be completed by the end of 1967.

Worldwide Demand for Potash Continues to Grow

The long-term growth prospects for potash are at least as promising as they are for phosphate rock and sulphur. Potash is one of the three primary plant foods, and about 95 percent is used as fertilizer. Price reductions in 1966 were made in the face of a continuing growth in demand which experts estimate will increase by as much as 200 percent by the year 1980.

World consumption of potash in 1966 amounted to an estimated 14 million tons, an increase of 5.8 percent over 1965, while world production increased 9.3 percent from 14.8 million tons in 1965 to 16.2 million tons in 1966.

United States consumption of potash rose 19.8 percent in 1966 to a total of 4 million tons, and U.S. production rose 6.2 percent from 3.1 million tons in 1965 to 3.3 million tons in 1966.





1966 Sulphur Demand Again Exceeded Output Despite New Records by Free World Producers

Free world production of sulphur established a new record of more than 24 million long tons in 1966, an increase of 1.7 million tons over 1965. But the demand for sulphur continued to grow even faster, and for the fourth consecutive year, sulphur consumption exceeded production. In 1966 the deficit was about 930,000 tons.

Explorations for new sources of sulphur by the industry were intensified but no new large commercial discoveries have been reported. The demands of the rapidly growing fertilizer and chemical industries were met only by drawing further on inventories.

During 1966 TGS' production of sulphur was nearly 3,000,000 long tons, an increase of 15 per cent over 1965. Production was increased both at the company's Frasch sulphur mines in Texas and at the two plants which recover sulphur from sour natural gas in Alberta, Canada. Frasch mining production facilities in Texas will be improved in 1967, and plans are being worked on to bring another Gulf Coast mine at Bully-camp Dome, 40 miles southwest of New Orleans, into production as soon as possible.

The offshore exploration for sulphur in the Gulf of Mexico off the coast of Texas in a joint venture with the Gulf Oil Corporation was completed during the Fall of 1966. Fourteen holes were drilled which successfully located salt domes with cap rock, but sulphur in commercial quantities was not found. The leases have been returned to the Government, and all the costs, including acquisition and exploration, have been written off.

Mexican Operations Planned

If negotiations now underway lead to agreement, Texas Gulf and its subsidiary in Mexico would set up a Mexican company to be owned 34 per cent by Texas Gulf and 66 per cent by the government and citizens of Mexico. The Mexican company would be eligible, under applicable Mexican law and regulation, to seek

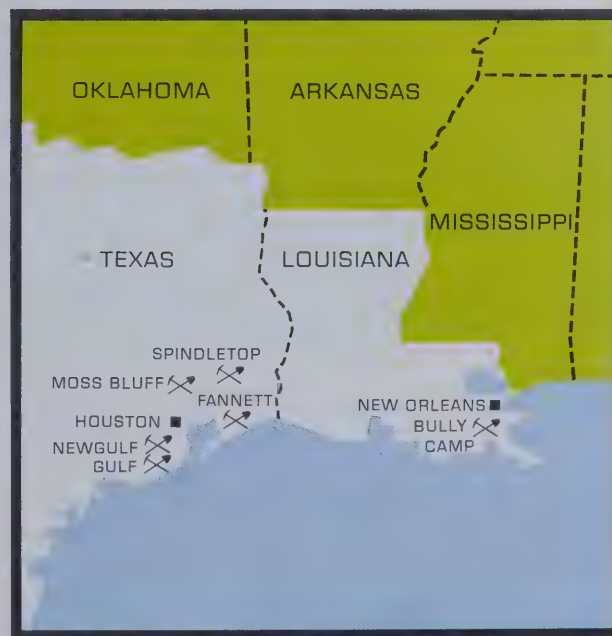
rights to explore for and mine sulphur. Subject to financial arrangements, the details of which are under consideration, the company would have title to the plant, equipment and other assets employed in an earlier operation conducted by Texas Gulf on the Isthmus of Tehuantepec and could call upon Texas Gulf for technical aid and certain other assistance.

Growth in Sulphur Consumption Dramatizes Need for Developing New Sources

While Free World consumption and production of sulphur were at record levels in 1966, the greatest increases in both occurred in the United States. U.S. production increased 10.4 per cent to a total of 9.1 million long tons, while U.S. consumption increased 12.6 per cent to 9.3 million tons.

For many years the long-term growth rate of sulphur consumption in the Free World was about 4 per cent annually. In contrast, during the past four years the increases have been 6.5 per cent in 1963, 10 per cent in 1964, 8.3 per cent in 1965, and 7.3 per cent in 1966. The 1966 increases would have been greater if the supply had been available.

Dramatizing the need for the development of new sources of sulphur is the fact that an average increase in Free World consumption of only 4.5 per cent per



◀ Sulphur brought to the surface by the Frasch hot-water process of mining accounted for most of the Free World's increase in production in 1966. Shown at left is a rig at a TGS sulphur mine.

Texas Gulf pioneered the shipment of sulphur in liquid form by ship, rail and truck, which provides both direct delivery to customers and to storage terminals convenient to major markets.



Production of sulphur recovered from sour natural gas at two plants operated by the TGS Gas Division in Alberta, Canada, was increased again in 1966. The Okotoks plant (above) near Calgary has produced 940,000 long tons of sulphur since June, 1959. A similar plant at Whitecourt near Edmonton, started in mid-1962, has been expanded and produced its one millionth ton of sulphur early in 1966.

year (substantially less than the trend of recent years) would result in a demand by 1970 of 30 million tons, which would be 6 million tons more than the Free World production in 1966.

Only improved prices can provide the incentive to search for and develop additional sources of sulphur. While sulphur prices continued to recover in 1966 from the depressed levels which have prevailed over the last ten years, the current domestic price is still significantly lower than the U.S. export price and remains substantially below other prices currently charged in world sulphur markets.

Mexican Frasch sulphur producers announced an increase of \$10 per ton to U.S. customers, effective January 1, 1967. This brought the delivered price of Mexican sulphur to \$43.50 per long ton f.o.b. terminal at Tampa, compared to Texas Gulf's f.o.b. Tampa terminal price of \$33 per long ton.

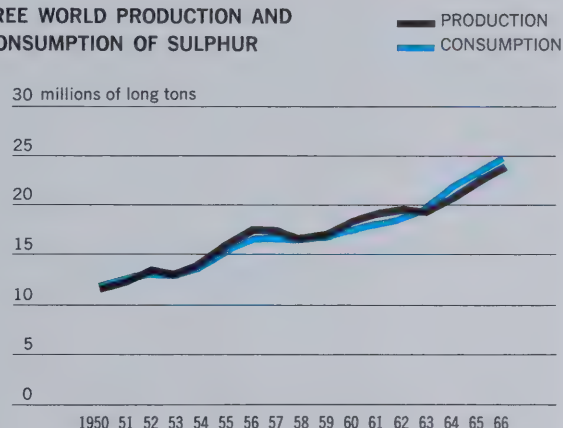
Recovered Sulphur, Oil and Gas Operations

Gas Division operations in Western Canada produced 420,000 long tons of sulphur in 1966, representing a 12.5 percent increase over 1965. Producing plants are located at Whitecourt, Alberta and Okotoks, Alberta. An additional 14,500 long tons were produced by the company's plant at Worland, Wyoming. Sulphur produced from these locations is recovered from the processing of sour natural gas.

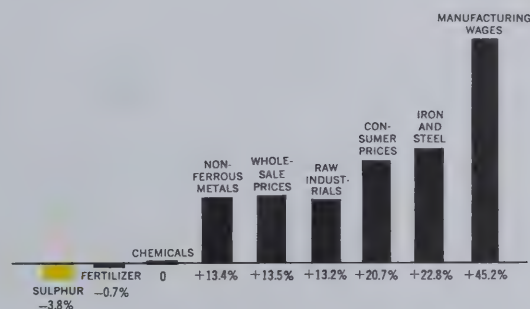
During 1966 both the Worland plant and the Whitecourt plant produced their millionth ton of sulphur. The liquid loading facilities at the Whitecourt plant were expanded to permit shipment of 1,700 long tons per day of liquid sulphur.

Gas sales from the Okotoks plant, in which TGS has a 37½ percent interest, to Canadian Western Natural Gas Co. Ltd., serving the City of Calgary, averaged 15 million cubic feet per day, representing a 15 percent increase over the normal plant design.

FREE WORLD PRODUCTION AND CONSUMPTION OF SULPHUR



RELATIVE PRICE AND WAGE CHANGES 1955-1966



Texas Gulf's share of oil and gas produced in Western Canada in 1966 included 55,800 barrels of oil and condensate, compared to 53,500 in 1965, and 7,800,000 thousand cubic feet of gas, compared with 7,660,000 thousand cubic feet in 1965.

Texas Gulf's production on the Gulf coast of the United States in 1966 included 279,000 barrels of oil, compared to 313,000 barrels in 1965, and 480,000 thousand cubic feet of gas, compared to 772,000 thousand cubic feet in 1965.

Gas sales from the North Jeanerette field, St. Mary Parish, Louisiana to the Michigan Wisconsin Pipeline Company began January 18, 1967. Initial deliveries from two wells approximated six million cubic feet per day. A third well was completed in the field on December 15, 1966.

Exploration and New Projects

Work on Texas Gulf's zinc-lead property on Baffin Island in the Canadian Arctic continued during the summer of 1966. Exploration and development work to date have established the presence of a substantial body of zinc, lead and iron sulphide ores.



A new company to explore for natural resources in Australia will be headed by Dr. Leo J. Miller (left), formerly manager of the Phosphate Division in North Carolina. Dr. Miller is shown studying a geological map of Australia with Dr. C. F. Fogarty, executive vice president.



Texas Gulf's trona project is in the Green River area of Wyoming where the company has rights to 12,799 acres of government land. Exploratory drilling and survey work have been completed, and commercial development will involve the establishment of a mine at a depth of 1300 to 1500 feet and surface processing facilities. Trona is a natural solid mixture of sodium carbonate and sodium bicarbonate which is readily converted to soda ash, a basic raw material of the chemical and other industries.

Financial Review

Earnings and Dividends

Net income for 1966 was \$28,095,817, or \$2.80 per share, compared to \$18,160,941, or \$1.81 per share, for 1965. This was an increase of \$9,934,876, a 55 per cent improvement. Most of this resulted from increases in sulphur tonnage sold and higher prices.

During 1966 cash dividends of \$4,017,418 were paid at the annual rate of 40¢ per share. These were the 178th through 181st consecutive quarterly dividends.

The \$24,078,399 of income retained by the company together with \$91,344,375 of outside financing were used for our major capital programs in 1966.

Revenues

Gross revenue from sales in 1966 amounted to \$132,718,172, an increase of \$33,737,011, or 34 per cent over 1965. This improvement was mostly from sulphur, although potash revenue nearly doubled and the beginning of metal concentrate and phosphate rock sales also contributed. Revenue from oil and gas was about the same as last year.

Royalty, interest and other income of \$3,337,809 in 1966 was substantially unchanged from 1965. An increase in royalty income on sulphur from improved industry conditions was offset by a decrease in interest income from short-term cash investments.

Costs and Expenses

Operating, delivery and other costs in 1966 increased \$15,601,000 or 22 per cent over 1965. Metals and Phosphate Division costs, including all their start-up charges to date, accounted for more than half of this increase. Most of the balance was due to the higher sulphur tonnage sold.

Selling and administrative expense increased \$2,402,000 to support our expanded activities. Interest expense increased by \$2,135,000. Average debt outstanding during 1966 was \$97,220,000 compared to \$146,344,000 at year-end.

Federal income tax expense at \$7,100,000 for 1966 was an increase over 1965 of \$3,700,000 consistent with the increase in income before taxes. The amortization of 7% investment tax credits amounted to \$350,000 in 1966.

Working Capital

On December 31, 1966 working capital amounted to \$33,529,000. During the year short-term debt in the amount of \$11,344,000 was incurred and short-term investments of \$14,944,000 were liquidated. At the end of 1966 the ratio of current assets to current liabilities was 2.4 to 1.

Accounts receivable increased \$4,296,000 as a result of larger sulphur and potash sales and the beginning of sales of metals and phosphate fertilizer materials. As sales of these new products continue to grow, accounts receivable will increase substantially, consistent with payment terms common in these industries.

Product inventory at year-end was \$18,628,000 or \$1,110,000 lower than a year earlier. The net change reflects a reduction in sulphur inventory, largely offset by the starting of fertilizer materials and metal concentrate inventories and an increase in potash inventory.

Property, Plant and Equipment

A comparative analysis of the company's investment in property, plant and equipment at year-end follows:

	<u>1966</u>	<u>1965</u>
Land and development . .	\$118,996,497	\$ 88,791,672
Less accumulated amortization	<u>39,488,814</u>	<u>38,191,486</u>
	<u>79,507,683</u>	<u>50,600,186</u>
Plant, machinery and equipment	236,609,877	131,504,587
Less accumulated depreciation	<u>40,733,383</u>	<u>36,697,691</u>
	<u>195,876,494</u>	<u>94,806,896</u>
Total	<u>\$275,384,177</u>	<u>\$145,407,082</u>

Generally, depreciation and amortization of operating properties are computed on the estimated useful or physical life, whichever is shorter. Depreciation and amortization provided during the year was \$6,622,000 compared to \$4,884,000 in 1965.

Capital Expenditures

During 1966 the company spent approximately \$140,000,000 on capital expenditures as compared to

\$60,000,000 in 1965. Expenditures included \$55,000,000 for the mine and mill at Timmins, Ontario; \$52,000,000 for the mine and fertilizer complex in North Carolina; \$24,000,000 for the acquisition of mineral and timber properties in Canada and Pennsylvania; and \$9,000,000 for exploration, the Wyoming trona project and capital improvements in other operating divisions.

Capital expenditures of approximately \$38,000,000 are budgeted for 1967. About \$16,000,000 will be spent in Timmins and North Carolina. The remainder includes outlays for the new Bullycamp sulphur mine, the crystallizer and a second mine shaft at Cane Creek, exploration, and other projects. During the past five years, capital expenditures have totaled more than \$260,000,000.

Financing

The large capital expenditures in 1966 required further outside financing. During the year the company borrowed \$80,000,000 in medium-term debt and \$11,344,000 in short-term debt from commercial banks. This brought total financing at year-end to \$146,344,000. Additional amounts available under the short-term lines of credit already established should be adequate to cover requirements foreseen for 1967.

The short-term lines of credit, established during mid-1966, are available for two years from such dates. Approximately half of these lines are in Canadian dollars with Canadian banks.

The medium-term debt was incurred under credit agreements providing for a revolving period of two years, and the right to convert such borrowings to an additional five year term. Interest, at the prime rate existing when negotiated, is at 5% with respect to \$60,000,000 and 5½% with respect to \$20,000,000 during the revolving period and the first year of the five year term. These rates increase ¼% for the remaining four years of the term. Of the amount converted to the five year term, one eighth is repayable at the end of each of the first two years and one quarter at the end of each of the last three years.

Long-term debt consists of 4.70% notes in the amount of \$55,000,000 due in 1989. The company is required to make annual prepayments of \$2,750,000 commencing in 1970.

Taxes

The company does not have any liability for current Federal income taxes because of accelerated depreciation, the deduction of development costs which have been capitalized on the balance sheet and because of a loss carry-forward resulting from similar items in prior years. The loss carry-forward still available should materially reduce the payment of income taxes for 1967. The Federal income tax expense in the statement of income represents a provision for deferred taxes.

Consolidated Statement of Income and Retained Earnings

	Year ended December 31 1966	Year ended December 31 1965
Gross Revenue from Sales	\$132,718,172	\$ 98,981,161
Royalties, Interest and Other Income	3,337,809	3,301,263
	<u>136,055,981</u>	<u>102,282,424</u>
Costs and Expenses		
Operating, delivery and other related costs and expenses, including exploration	86,363,271	70,761,908
Selling, general and administrative	9,764,686	7,362,266
Interest	4,732,207	2,597,309
Federal income taxes—estimated	7,100,000	3,400,000
	<u>107,960,164</u>	<u>84,121,483</u>
Net Income for the Year	28,095,817	18,160,941
Retained Earnings January 1	152,889,016	138,735,527
	<u>180,984,833</u>	<u>156,896,468</u>
Deduct cash dividends	4,017,418	4,007,452
Retained Earnings December 31	<u><u>\$176,967,415</u></u>	<u><u>\$152,889,016</u></u>
Net Income Per Share	\$2.80	\$1.81
Dividends Per Share	\$.40	\$.40
Number of Shares Outstanding	10,048,319	10,034,119

See accompanying notes to financial statements

Consolidated Balance Sheet**ASSETS**

	December 31 1966	December 31 1965
Current Assets		
Cash	\$ 8,128,827	\$ 5,755,084
Short-term cash investments.....	—	14,944,340
Accounts receivable	25,765,123	21,469,502
Inventories of minerals and products at lower of average cost or market.....	18,628,329	19,738,078
Materials and supplies at average cost	4,731,312	2,593,185
Total Current Assets	57,253,591	64,500,189
 Investments, Advances and Other Assets		
Securities of and advances to unconsolidated subsidiaries, less reserve for exploration costs, \$1,312,630 in 1966 and \$1,181,464 in 1965.....	5,368,739	4,711,329
Advance payments relating to potash property.....	13,275,257	12,852,304
Notes receivable, advances and other assets.....	9,824,752	11,185,768
	28,468,748	28,749,401
 Property, Plant and Equipment at cost.....	355,606,374	220,296,259
Less accumulated depreciation and amortization.....	80,222,197	74,889,177
	275,384,177	145,407,082
 Deferred Charges	1,931,433	2,226,924
	<u>\$363,037,949</u>	<u>\$240,883,596</u>

LIABILITIES AND STOCKHOLDERS' EQUITY

	December 31 1966	December 31 1965
Current Liabilities		
Short-term notes payable.....	\$ 11,344,375	\$ —
Accounts payable and accrued liabilities.....	11,362,028	11,218,435
Taxes payable.....	1,018,455	824,171
Total Current Liabilities.....	<u>23,724,858</u>	<u>12,042,606</u>
 Non-Current Notes Payable		
Notes payable under revolving credit agreements.....	80,000,000	—
4.70% Notes, due 1989	55,000,000	55,000,000
	<u>135,000,000</u>	<u>55,000,000</u>
Deferred Federal Income Taxes	27,900,210	21,853,856
 Stockholders' Equity		
Capital stock, without par value —Authorized 15,000,000 shares; issued 11,520,000 shares.....	26,175,000	26,175,000
Capital surplus from sale of treasury stock.....	252,472	165,441
Retained earnings	176,967,415	152,889,016
	<u>203,394,887</u>	<u>179,229,457</u>
Less cost of treasury stock (1,471,681 shares in 1966 and 1,485,881 shares in 1965).....	26,982,006	27,242,323
Stockholders' Equity	<u>176,412,881</u>	<u>151,987,134</u>
	<u>\$363,037,949</u>	<u>\$240,883,596</u>

See accompanying notes to financial statements

Funds Statement

	Year ended December 31 1966	Year ended December 31 1965
Funds were provided from		
Net income	\$ 28,096,000	\$18,161,000
Charges to income not involving working capital		
Depreciation and amortization	6,622,000	4,884,000
Deferred taxes	7,100,000	3,400,000
Other items—net	<u>1,631,000</u>	<u>1,268,000</u>
	43,449,000	27,713,000
Other accounts—net	107,000	570,000
Financing	<u>80,000,000</u>	<u>—</u>
	<u>123,556,000</u>	<u>28,283,000</u>
Funds were required for		
Dividends	4,017,000	4,007,000
Net additions to property, plant and equipment	137,881,000	58,018,000
Additions to investments and advances over amounts liquidated	<u>587,000</u>	<u>797,000</u>
	<u>142,485,000</u>	<u>62,822,000</u>
Resulting in a decrease in working capital of	<u>\$ 18,929,000</u>	<u>\$34,539,000</u>

See accompanying notes to financial statements

Notes to Financial Statements

1. The consolidated financial statements include the accounts of the Company and all of its significant wholly-owned operating subsidiaries. The Company's equity in its unconsolidated subsidiaries approximates the amounts at which such subsidiaries are carried in the balance sheet.

2. The Company has deferred to future periods the income tax benefit resulting from the deduction for tax purposes of certain expenditures included among the assets on the balance sheet. The deferred tax reserve pertains principally to depreciable plant and equipment, development costs incurred on several properties and advance net profit payments related to the potash property. The portion of deferred taxes related to deductions taken for items carried in current assets has been eliminated by the application of a net operating loss carry-forward. The investment tax credit is being amortized over the estimated lives of the related assets.

3. For information regarding non-current notes payable, reference is made to "Financing" in the Financial Review section of this report. Both the revolving credit notes and the 4.70% notes contain provisions restricting the payment of cash dividends or the acquisition for value of any shares of the Company's stock. Retained earnings in the approximate amount of \$56,800,000 at December 31, 1966 were in excess of such restrictions. Additionally, the revolving credit note agreements also require maintenance of \$30,000,000 of working capital, which in effect limits the Company's ability to pay cash dividends. At December 31, 1966 working capital as defined in the agreements approximated \$33,400,000. The note agreements also provide that funded indebtedness including the guarantee of obligations of others for borrowed money, may not exceed stockholders' equity plus deferred Federal income taxes.

4. The Company and its subsidiaries have several pension plans covering substantially all of their employees. The total pension contributions for the year were \$1,914,000. Funds have been provided to cover all past service as well as any vested benefits which have been earned.

5. Under the Company's stock option plan, options may be granted to officers and employees of the Company and subsidiaries to purchase up to 250,000 shares of the Company's stock. The options become exercisable, as to 40 per cent, eighteen months after date of grant, as to 70 per cent, three years after date of grant and as to 100 percent, four years after date of grant. Options granted prior to 1964 (restricted options) expire ten years after grant; options granted subsequently (qualified options) expire five years after grant. During the year options were granted to purchase 48,000 shares at a price of \$77½ per share, and options to purchase 14,200 shares were exercised at prices of \$23¼ and \$24½ per share. No options were terminated or cancelled during the year. At year-end there were 129,250 shares under option (41,920 of which were exercisable) at prices ranging from \$23¼ to \$77½ per share, and 79,530 shares available for grant. The excess of the proceeds from the sale of shares over their cost was added to capital surplus in 1966 in the amount of \$87,031.

6. The Company (together with others) is a defendant in approximately 90 lawsuits (some of which allegedly are class actions) filed by former stockholders who sold shares of the Company's stock during the period from November 1963 to mid-April 1964. These suits charge that news concerning the Company's exploration activities near Timmins was improperly withheld. Plaintiffs seek compensatory and punitive monetary damages in substantial amounts. The Company has been advised by its counsel that, in their opinion, the Company should be successful in the defense of the claims against it.

The Company is a defendant in three lawsuits filed in Canada which contest the Company's right to ownership of the Kidd Creek ore body. In the opinion of counsel for the Company, the Company should be successful in the defense of these lawsuits.

In addition, the Company is defending other litigation which, in the opinion of counsel for the Company, it should be successful in defending or should incur no material monetary liability beyond applicable insurance coverage.

Accountants' Report

PEAT, MARWICK, MITCHELL & CO.

CERTIFIED PUBLIC ACCOUNTANTS

SEVENTY PINE STREET, NEW YORK, NEW YORK 10005

To the Stockholders of Texas Gulf Sulphur Company:

We have examined the consolidated balance sheet of Texas Gulf Sulphur Company and consolidated subsidiaries as of December 31, 1966 and the related statement of income and retained earnings and the funds statement for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the accompanying consolidated balance sheet and statement of consolidated income and retained earnings present fairly the financial position of Texas Gulf Sulphur Company and consolidated subsidiaries at December 31, 1966 and the results of their operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year. Also, in our opinion, the accompanying funds statement for the year ended December 31, 1966 presents fairly the information shown therein.

February 24, 1967

Peat, Marwick, Mitchell & Co.

Ten Year Financial Review

	1966	1965	1964
Income			
(in thousands of dollars)			
Gross revenue from sales.....	\$132,718	\$ 98,981	\$ 70,370
Total revenue	136,056	102,282	73,276
Operating, delivery and other related costs and expenses, including exploration.....	86,363	70,762	52,173
Selling, general and administrative expenses	9,765	7,362	6,043
Interest expense	4,732	2,597	2,304
Federal income taxes—estimated	7,100	3,400	1,200
Net income	28,096	18,161	11,556

Financial Position

(in thousands of dollars)

Current assets	57,254	64,500	97,204
Current liabilities	23,725	12,043	10,033
Working capital	33,529	52,458	87,171
Product inventory.....	18,628	19,738	24,026
Property, plant and equipment—net.....	275,384	145,407	92,380
Total assets	363,038	240,884	220,643
Non-current notes payable.....	135,000	55,000	55,000
Stockholders' equity	176,413	151,987	137,382

Other Data

Net income per share.....	2.80	1.81	1.15
Dividends per share.....	.40	.40	.40
Number of stockholders	49,553	47,911	50,821
Number of shares outstanding.....	10,048,319	10,034,119	10,015,899

1963	1962	1961	1960	1959	1958	1957
\$ 62,249	\$ 58,971	\$ 58,949	\$ 58,935	\$ 63,597	\$ 57,057	\$ 66,884
63,576	60,852	60,946	61,198	64,868	57,937	68,108
47,625	40,569	39,607	39,129	41,648	35,423	42,805
5,047	4,396	4,006	4,635	5,182	5,631	5,046
—	—	—	—	—	—	—
1,550	3,750	4,750	4,750	4,700	3,500	2,700
9,354	12,137	12,583	12,684 *	13,338	13,383	17,557
64,772	55,826	75,241	82,184	75,969	72,223	69,888
17,797	4,397	6,375	3,543	6,817	5,770	5,824
46,975	51,429	68,866	78,641	69,152	66,453	64,064
27,717	30,315	28,534	26,453	26,850	29,149	25,998
72,732	62,111	41,857	93,454	90,129	85,940	82,654
187,283	141,601	133,875	125,403	123,565	119,445	116,124
—	—	—	—	—	—	—
129,715	124,512	117,886	115,323	111,625	110,560	107,197
.93	1.21	1.26	1.27 *	1.33	1.34	1.75
.40	.55	1.00	1.00	1.00	1.00	1.75
64,918	71,829	71,997	74,666	74,168	71,086	69,887
10,011,199	10,020,000	10,020,000	10,020,000	10,020,000	10,020,000	10,020,000

*Excludes extraordinary income of \$1,034,000 or 10¢ per share.

Officers and Staff

Claude O. Stephens
President

Charles F. Fogarty
Executive Vice President

Hubbard S. Caven
Vice President, Austin, Texas

David M. Crawford
Secretary and Manager of
Public and Government Relations

Harold B. Kline
Vice President and General Counsel

Guy T. McBride, Jr.
Vice President and General Manager,
Phosphate Division, Aurora, North Carolina

Gordon N. McKee, Jr.
Treasurer

Ira E. McKeever, Jr.
Vice President,
Frasch Sulphur Division, Houston, Texas

Walter F. Meyer
Controller

Richard D. Mollison
Vice President,
Metals Division, Toronto, Ontario

A. Nelson Myers
Vice President, Marketing Division

Thomas P. Townsend
Vice President

Administrative

John A. Murray
Frank E. Tippie

Office Manager
Administrative Assistant

Corporate Personnel

Gino P. Giusti
William O. Britt
Bernard J. Goodman
F. Wayne White

Manager
Wage and Salary Supervisor
Payroll Supervisor
Supervisor of Employee Benefits

Exploration

Walter Holyk
Elgin D. Bell
David A. Lowrie
Frank R. Moulton, Jr.
John F. MacDougall
George W. Mannard
George Podolsky
James A. L. White
Paul C. Gilmour
J. Russell Loudon
Robert M. Slipp

General Manager, Toronto
Regional Manager of Exploration, Calgary, Alberta
Regional Manager of Exploration, Toronto
Regional Manager of Exploration, Houston
Senior Geologist, Calgary
Senior Geologist, Toronto
Senior Geophysicist, Toronto
Mineral Economist, Toronto
District Geologist, Tucson, Arizona
District Geologist, Vancouver, British Columbia
District Geologist, Raleigh, North Carolina

Finance

Edward K. Brass
James A. Campbell
John T. Duffy
James J. Finn
Edson L. Foster, Jr.
Robert P. Hedley
William F. Seamon

Chairman of Plans and Finance Committee
Assistant Controller
Manager of Budgets and Internal Audits
Assistant Controller
Assistant Controller
Assistant Treasurer
Credit Manager

Legal

Joseph C. Brown
John D. Hartigan
George W. Hugo
Earl L. Huntington
Richard Kirk

Counsel, Houston
Counsel and Assistant Secretary
Counsel, Houston
Counsel and Assistant Secretary
Counsel and Assistant Secretary

Public Relations

William D. Askin
James A. Cox

Editor, Golden Triangle Magazine, Houston
Assistant, Public Relations

Research

James R. West
Robert J. Boyle
Arthur Gloster
J. Frank Henderson
Jack H. McLellan

Manager
Assistant Manager
Assistant Manager
Assistant Manager
Assistant Manager

Unless otherwise indicated location is New York

Marketing Division

Sulphur and Metal Sales

John W. Hall, Jr.	Manager
Frank J. Claydon, Jr.	Assistant Sales Manager, Sulphur
H. Newton Cunningham, Jr.	Assistant Sales Manager, Sulphur, Houston
Walter B. Gillette	Assistant Sales Manager, Sulphur
Kent D. Hoffman	Assistant Sales Manager, Metals

Potash and Phosphate Sales

Bryan W. Guess	Manager
Charles E. Martin	Assistant Manager
Robert L. Borg	Midwest Sales Manager, Chicago, Illinois
Samuel E. Hardwick, Jr.	Northeast Sales Manager, Richmond, Virginia
Jack T. Jones	Southeast Sales Manager, Atlanta, Georgia
Charles T. Odum, Jr.	Southwest Sales Manager, Houston

Traffic

Stephen F. Gilmore	General Traffic Manager, Houston
R. C. Ballard Trigg	Traffic Manager, Houston
William A. Carson, Jr.	Assistant Traffic Manager, Potash, Houston
William Hansen, Jr.	Assistant Traffic Manager
Maurice S. Weber	Assistant Traffic Manager, Sulphur, Houston
William H. Johnston	Manager of Technical Services, Sulphur, Houston

Advertising

Jerry L. Cramer	Manager
-----------------	---------

Marketing Research

Serge L. Levitsky	Manager
John R. Camp	Assistant Manager
Jeanne M. Collins	Senior Market Analyst

Operating Divisions

Frasch Sulphur Division

Newgulf, Texas

E. Orys Mason	General Manager
Clifford L. Barr	Assistant General Manager
Robert M. Stoy	Assistant General Manager, Beaumont, Texas
R. Lindsey Carter, Jr.	Manager of Purchasing and Warehousing
Edward H. Conroy, Jr.	Manager of Quality Control
Charles F. Drees	Manager of Electrical Department
Earl W. Hanna	Office Manager
Edmond Herschap, Jr.	Manager of Personnel and Industrial Relations
George W. Lowther	Manager of Power Plants
Robert L. McDaniel	Manager of Traffic, Beaumont
Walter B. Preston	Manager of Mechanical Maintenance
Raymond J. Staffa	Manager of Engineering
Ray Ward	Resident Manager, Beaumont
Arnold F. Zemanek	Manager of Field Operations

Gas Division

Calgary, Alberta

James W. Estep	General Manager
Frederick J. Ronicker	Assistant General Manager
Elmer M. Berlie	Plant Manager, Okotoks, Alberta
Douglas H. Church	Chief Petroleum Engineer
Albert L. Mayfield	Plant Manager, Worland, Wyoming
T. Stafford Mosher	Chief Accountant
Edward W. Plum	Special Projects Engineer
James J. Rennie	Traffic Superintendent, Whitecourt, Alberta
Garry A. Smith	Production Engineer

Metals Division**Toronto, Ontario**

R. Hugh Clayton
Robert J. C. Tait

Supervisor of Special Projects
Chief Metallurgist, Timmins, Ontario

Ecstall Mining Limited, Timmins, Ontario

David G. Baskin
P. Ray Clarke
Donald F. Grenville
Gerard F. O'Halloran
Alan G. Perry
James B. Shannon
Donald P. Taylor

Traffic Superintendent
Mill Superintendent
Personnel and Industrial Relations Superintendent
Maintenance Superintendent
Engineering Superintendent
Mine Superintendent
Chief Accountant

Phosphate Division**Aurora, North Carolina**

Cecil W. Bradley
June W. Crawford
David C. Edmiston, Jr.
Harvey A. Franz, Jr.
J. Hayes Gregory
Donald D. Marston
Earl M. Mason
John S. Myrick
James R. Paden
George R. Phillips
Theodore B. Simpson

Traffic Superintendent
Engineering Services Superintendent
Mill Superintendent
Chief Accountant
Land Management Superintendent
Mine Superintendent
Purchasing Agent
Acid Plants Superintendent
Fertilizer Plants Superintendent
Personnel and Industrial Relations Superintendent
Technical Services Superintendent

Potash Division**Moab, Utah**

H. V. W. Donohoo
Bill L. Bessinger
Floyd E. Albertson
Anthony J. Fratto
Kenneth J. Kutz
Frank J. Peternell
J. G. Pinkerton
Richard C. Reynolds, Jr.
Edward F. Ziolkowski

General Manager
Assistant General Manager
Mill Superintendent
Maintenance Superintendent
Supervisor of Special Projects, Salt Lake City, Utah
Supervisor of Safety
Administrative Manager
Supervisor of Personnel and Industrial Relations
Mine Superintendent

Trona

James H. Ogg

Project Manager, Green River, Wyoming

Australia

Leo J. Miller

Manager, Perth, Australia

Subsidiary**Ecstall Mining Limited**

Claude O. Stephens
Charles F. Fogarty
Richard D. Mollison
F. Raymond Jones
Walter Holyk
Harold B. Kline
David M. Crawford
Earl L. Huntington
Gordon N. McKee, Jr.
Walter F. Meyer

Chairman of the Board and Director
President and Director
Executive Vice President and Director, Toronto, Ontario
Vice President-Production and Director, Timmins
Director, Toronto
Director
Secretary
Vice President-Counsel
Treasurer
Controller

Affiliate**Sulphur Export Corporation**

Paul W. Douglas
Ernest A. Graupner
Richard T. Dieckman
John J. Geraghty
Frank L. Jackson
Herbert R. Miller
Lawrence N. Odence

Chairman of Board and Joint Managing Director
President and Joint Managing Director
Assistant Secretary-Treasurer
Secretary-Treasurer
Vice President
Vice President
Vice President

Shipments of phosphate rock and phosphate fertilizer materials from Lee Creek, North Carolina, by both rail and water began in 1966. Four new mechanized barges of 2680 short ton capacity were built to TGS specifications for operation on inland waterways.



TGS